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(Accepted 19 Jan 1979.)

NOTEWORTHY COLLECTIONS

DISTICHLIS SPICATA var. STRICTA (Torr.) Beetle (POACEAE).—Ecuador, Galapagos Islands, Gardner Bay, Española, 12 Jan 1975, Norman and James s.n. (US); Feb 1977, Falco s.n. (Darwin Research Station Herbarium). A single population 10 m by 20 m in bare sandy area subject to occasional wave action and salt spray (Porter, pers. comm., 1978). Both specimens with $\mathfrak P$ inflorescences. Verified by A. A. Beetle, Jan 1978 (Falco s.n.).

Previous knowledge. Known from W N.A., S to Chile and in Australia (Beetle, pers. comm., 1978). Specifically excluded by Reeder and Reeder in Wiggins and Porter (Flora of the Galapagos Islands. 1971) because earlier report was based on misindentification.

Significance. 800 km disjunction. Probably recent introduction to the archipelago. Perhaps only \circ plants present.—Eliane M. Norman, Department of Biology, Stetson University, DeLand, FL 32720. (Accepted 31 Mar 79.)

Crossosoma californicum Nutt. (Crossosomataceae).—USA, CA, Los Angeles Co., Palos Verdes Peninsula, Rancho Palos Verdes, 33°44′22″N, 118°20′45″W, 5 Dec 1977, Henrickson 16341 (RSA, CSLA) in fruit; 10 Jan 1979, Henrickson 17810 (CAS, CSLA, RSA, SB) in flower. Two plants observed at ca. 175 m, ca. 165 m NE of Forrestal Dr., NE of Ladera Linda Elementary School at base of granitic NW-facing slope at mouth of steep abandoned granite quarry. Lower plant ca. 2.4 m high, 2.2 m wide, upper plant ca. 2.5 m high, 3.5 m wide with basal stem to 54 mm. In coastal sage scrub vegetation with Artemisia californica, Rhus integrifolia, Salvia mellifera, Eriogonum cinereum, Dudleya lanceolata, and Galium angustifolium var. angustifolium.

Previous knowledge. Known only from 3 Channel ids.: San Clemente Id. where rare in 1 population on W slope at 460 m (Raven, Aliso 5:289–347. 1963); Santa Catalina Id. where common from 5–490 m (Thorne, Aliso 6(3):1–77. 1967); and Guadalupe Id. where rare and now restricted to rocky, inaccessible exposures from 50 to 950 m. It also occurs on Outer Islet, a small rocky island at the S end of Guadalupe Id. not inhabited by goats. (Moran, pers. com.)

Significance. First record from mainland USA, however, it must be noted that "the Palos Verdes Hills area was an island itself until joined to the mainland during the Quaternary (Pleistocene or Recent)" (Valentine and Lipps, In Philbrick, Proc. Symp.

Biol. Calif. Islands. 1967). Thorne (pers. com.) notes *C. californicum* often establishes on exposed slippage slopes in open soil. These two specimens may date from disturbances associated with quarrying in the 1940's. Whether population is relictual or derived from those on Santa Catalina Id. (ca. 34 km away—perhaps by seeds dispersed to mainland by birds or possibly man) is not known. No other intentionally cultivated plants occur near the site. Specimens from Palos Verdes exhibit no noticeable morphological divergence from other known populations. The general area is slated for development though this specific area will not be disturbed. Size of family has dramatically increased from only 1 genus with 2–3 species to 3 genera with 11–13 species with description of *Apacheria chiricahuensis* Mason (Madroño 23:105–108. 1975) and the transfer of *Forsellesia* Greene with ca. 8–9 species from the Celastraceae to Crossosomataceae (Thorne, Aliso 9:171–178. 1978).—JAMES HENRICKSON, Department of Biology, California State University, Los Angeles 90032. (Accepted 2 Apr 79.)

PHYSALIS LOBATA Torr. (SOLANACEAE).—USA, CA, San Bernardino Co., Clark's Pass (T15 R14E S17 SE½), 25 Nov 1975, Jones, Ericson, Colin, and Overman 23 (MACF, UC). Common in sink area just E of Clark's Pass, off hwy 62, ca. 47 km E of Twenty-Nine Palms, 580 m; soil primarily decomposed granite. Flowers sporadically all year with rains, peak flowering Sep—Jan, fruits Oct—Mar. Root perennial, numerous seeds. Verified by Robert Thorne, 1976. Other specimens: San Bernardino Co., 8 km N of Clark's Pass, N side Sheep Hole Mtns in alkaline dry lake, 11 Apr 1976, Shade s.n. (UCR); San Bernardino Co., Homer Wash, 28 km SE of Essex and 35 km SW of Needles (Stepladder Mtns 15' Quad.), 6 Apr 1978, Twitchell and Sanders s.n. (BLM desert plan collections).

Previous knowledge. Range: KS to TX, S NV, AZ, and N Mex. Nearest records in Maricopa, Pinal, and Pima cos., AZ (Kearney and Peebles, Arizona Flora. 1960). (Herbaria consulted: MACF, UCR, RSA). Diagnostic characters—fls violet to purple, rarely white, central eye of corolla white, anthers yellow; lvs long-petioled, cuneate at base, sinuately denticulate to dentate.

Significance. New to California; 160 km disjunction. Apparently bird disseminated and establishing westward. Referred by some botanists to Quincula lobata Raf., because it differs from other species of Physalis by having a violet to purple corolla and a lobed stigma.—C. Eugene Jones, Larry J. Colin, Trudy R. Ericson, and R. John Little, Department of Biological Science, California State University, Fullerton 92634; and Andrew Sanders, Biology Department, University of California, Riverside 92521. (Accepted 4 Feb 1978.)

NOTES AND NEWS

SEED ABORTION IN Anagallis arvensis on Southeast Farallon Island, California.—Seed mortality in the period between pollination and maturation is difficult to measure and its significance in plant life histories has often been ignored. Because pollination efficiency is usually unknown, seed set is an unsatisfactory measure of prematuration seed mortality. For self-pollinating species the problem of pollination efficiency is reduced. If one can count the number of apparently viable seeds shortly after flowering then, by comparing this with the number of seeds matured, one can obtain an estimate of seed mortality.

During the springs and summers of 1974 and 1975, I investigated the pre-maturation seed mortality in *Anagallis arvensis* L. (Primulaceae), a self-pollinating (Fryxell, Bot.